PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) 09669/086001

	Application Number 10/581,130-Conf. #1360	Filed May 31, 2006
	First Named Inventor Van Tai Ngo et al.	
	Art Unit 2185	Examiner M. A. Giardino

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
     Note: No more than five (5) pages may be provided.

I am the

☐ applicant /inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b)
is enclosed.   (Form PTO/SB/96)

[x] attorney or agent of record.

Registration number _____ 33,986 _____

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34. _____

/Jonathan P. Osha/
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Signature

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October 9, 2008
_____
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

[x] *Total of ___ 1 ___ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Van Tai Ngo et al.   Confirmation No.: 1360

Application No.: 10/581,130   Art Unit: 2185

Filed: May 31, 2006   Examiner: M.A. Giardino

For: METHOD TO CONTROL THE ACCESS IN A
      FLASH MEMORY AND SYSTEM FOR THE
      IMPLEMENTATION OF SUCH A METHOD

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF AND REQUEST FOR REVIEW

Disposition of the Claims

Claims 1 and 3-13 are pending. Claims 1 and 5 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 5. The claims were finally rejected in the Office Action dated July 9, 2008 ("Final OA").

Rejections under 35 U.S.C. §103

MPEP §2143 states that "the key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739, 75 U.S.L.W. 4289 (2007) noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit. *See,* MPEP §2143.

In particular, the Examiner "must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference; ..." MPEP § 2143(A). Applicants assert that the prior art, whether viewed separately or in combination, fails to teach or suggest all the limitations of the pending independent claims.

<u>Claims 1, 3, 5-7, 9-10, and 12</u>

Claims 1, 3, 5-7, 9, 10, and 12 stand rejected under 35 U.S.C. § 103 as unpatentable over U.S. Patent No. 6,154,819 ("Larsen") in view of U.S. Patent No. 4,177,510 ("Appell"). To the extent that this rejection applies to the amended claims, the rejection is respectfully traversed.

Against the context of having received a write request to write data to an area of a partition located within a sector of flash type memory, independent claim 1 recites, in part, "making a second determination about whether the owner [of the data to be written] has permission to erase the entire sector in which the partition is located using a rule, wherein the rule verifies that the write request does not delete data of an owner other than the owner issuing the write request" (hereinafter, 'the second determination step'). The second determination step is critical because "... in the Flash memory, a sector defines the unit of erasable memory: consequently to modify a non-blank area of the sector, for example a partition, the entire sector must be erased. To write in a non-blank area of a sector, the entire sector is erased: a sector forms an indivisible unit of erasure." *See* Specification, paragraph [0006]. Further, the Specification discloses multiple partitions inside of a single sector, wherein the ownership of the multiple partitions is non-uniform. *See* Specification, Figure 1. Because writing to a partition within the sector necessitates erasure of the entire sector, a possible consequence is that a write performed by a first owner in one partition of the sector causes the erasure of data in another partition of the same sector owned by a second owner. In relief of such inadvertent data deletion by neighboring owners within a sector, claim 1 discloses the second determination step.

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1. **The Examiner is mischaracterizing the cited art as teaching "making a second determination about whether the owner [of the data to be written] has permission to erase the entire sector in which the partition is located using a rule, wherein the rule verifies that the write request does not delete data of an owner other than the owner issuing the write request."**

The Examiner admits that Larsen fails to teach the second determination step and instead relies upon Appell to teach the limitation. More specifically, the Examiner references Appell ("hardware checks determine that the address used by a process is part of the address space assigned to the process, and if the address is outside the level of privilege assigned, then access to addressed information is denied", *see* Appell, col 6 lines 65-68) as teaching "segregating a memory such that memory can only be written if it belongs to that particular process," and as such "since each application would have its own address space outside of which it is not allowed to access memory … Appell's protection scheme will ensure that a write request does not delete data of an owner (application) other than that of the owner that issued the request." *See* Final OA, pages 3-4; Advisory Action dated September 22, 2008, page 2.

Contrary to the Examiner's position, Appell fails to teach or suggest that which Larsen lacks, as the second determination step is different from the memory segregation scheme disclosed by Appell. Specifically, the memory segregation scheme of Appell determines access on the basis of "if an address space being used by a process is part of the address space assigned to that process" and therefore essentially verifies the process against the address space it is attempting to access, *see* Appell, col 6 lines 65-68.

In contrast, the second determination step of the claimed invention verifies that the owner of the data has permission to erase the entire section to which the data will be written. Said another way, the second determination includes: (i) a determination of the ownership of the current data in the sector (*i.e.,* the sector in which the new data is to be written) and (ii) whether the owner of all the current data in the sector is owned by the owner of the data to be written. This distinction enables the second determination step to address the following which Appell does not: (1) the sector-wide erasure subsequent to performing a write operation; and (2) the ownership implications

of sector-wide erasure in a sector having non-uniform partition ownership. Said another way, the teachings of Appell merely disclose the first claimed determination step (*i.e.*, whether a process has access to a sector (or portion thereof)) but does not take the additional step to determine whether the process has the necessary permission (*i.e.*, whether the process owns all data written to the sector) to perform an operation in the sector.

Moreover, Appell allows multiple processes to access a single sector. See Appell, col. 8 l.42- col. 9, l.43. Thus, a first process may write to the sector and a second process, which also has access to the sector, may erase the data written by the first process while writing new data to the sector. This scenario, which is allowed under the memory segregation scheme of Appeal, is clearly contrary to the claimed invention which requires that "the rule verifies that the write request does not delete data of an owner other than the owner issuing the write request."

Accordingly, the memory segregation scheme disclosed by Appell does not teach or suggest making a second determination about whether the owner [of the data to be written] has permission to erase the entire sector in which the partition is located using a rule, wherein the rule verifies that the write request does not delete data of an owner other than the owner issuing the write request.

In view of the above, amended independent claim 1 is not rendered obvious by Larsen and Appell, whether viewed separately or in combination. Amended independent claim 5 includes the at least the same patentable limitations as discussed above for amended independent claim 1 and is therefore patentable for at least the same reasons as amended independent claim 1. Pending dependent claims 3, 6-7, 9-10, and 12 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

<u>Claims 4, 8, 11, and 13</u>

Claims 4, 11, and 13 stand rejected under 35 U.S.C. § 103 as unpatentable over Larsen and Appell in view of U.S. Patent No. 6,401,160 ("See"). Claim 8 stands rejected under 35 U.S.C. § 103 as unpatentable over Larsen and Appell in view of U.S. Patent Application Publication No. 7,177,975 ("Toombs"). The Examiner has relied upon neither See nor Toombs to teach the second determination step. Further, neither See nor Toombs teach or suggest that which Larsen and Appell

lack. Accordingly, claims 4, 8, 11, and 13 are patentable for at least the same reasons described above. To the extent that this rejection applies to the amended claims, the rejection is respectfully traversed.

The Examiner has not satisfied the requirements of MPEP § 2143.

In view of the above, the Examiner has failed to satisfy the requirements of MPEP §2143. Specifically, Larsen and Appell, whether considered separately or in combination, fail to teach or suggest all of the limitations of independent claims 1 and 5. Further, See and Toombs fail to teach or suggest that which Larsen and Appell lack. Pending dependent claims are patentable for at least the same reasons. Accordingly, a favorable decision from the panel is respectfully requested. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 09669/086001).

Dated: October 9, 2008   Respectfully submitted,

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